Datasheet: 6625-1010

BATCH NUMBER 152653

Description:	MOUSE ANTI RAT NESTIN
Specificity:	NESTIN
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	Rat-401 (4D4)
Isotype:	IgG1
Quantity:	0.1 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Immunohistology - Frozen	▪			1/40 - 1/400
Immunohistology - Paraffin	▪			1/40 - 1/400
Western Blotting	▪			
Immunofluorescence	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species

Rat

Species Cross Reactivity

Reacts with: Mouse
Does not react with:Human
N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG - liquid

Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

Buffer Solution	TRIS buffered glycine.
Preservative Stabilisers	0.05% Sodium Azide (NaN_3)
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Nestin purified from embryonic rat spinal cord.
External Database Links	**UniProt:** P21263 Related reagents **Entrez Gene:** 25491 Nes Related reagents
RRID	AB_2151135
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the NS1 myeloma cell line.
Specificity	**Mouse anti Rat Nestin antibody, clone Rat-401** recognizes rat nestin, a large intermediate filament protein transiently expressed in embryonic glian cells (Hockfield and McKay 1985). It is predominately expressed in stem cells of the developing nervous system. Terminal differentiation is associated with a loss of nestin expression. Nestin expression has also been noted in other embryonic tissues, also in most Glioblastoma multiformes and many melanomas.
Immunohistology	We recommend perfusing tissues with 4% paraformaldehyde at pH 7.4 for light microscopy or with either 4% paraformaldehyde at pH 10.0 or 4% paraformaldehyde with 0.1% glutaraldehyde at pH 7.4 for EM. For Immunocytochemistry we recommend using cells fixed in 4% paraformaldehyde buffered with 50 mM sodium borate at pH 9.5.
Western Blotting	Mouse anti Rat Nestin antibody, clone Rat-401 reacts with a band at 200-220 kDa in reducing gels of newborn rat or mouse cell extracts. For western blotting it is recommended that samples should be boiled in 4 volumes of 125 mM Tris, pH 6.8, 10% 2-mercaptoethanol, 10% glycerol and 4.6% SDS. Membranes should be blocked with milk or BSA. 5% PAGE gels are suggested.
References	1. Arnold, T.D. *et al.* (2012) Defective Retinal Vascular Endothelial Cell Development As a Consequence of Impaired Integrin αVβ8-Mediated Activation of Transforming Growth Factor-β. J Neurosci. 32: 1197-206. 2. Mori, T. *et al.* (2005) Combination of hTERT and bmi-1, E6, or E7 induces prolongation of the life span of bone marrow stromal cells from an elderly donor without affecting their neurogenic potential. Mol Cell Biol. 25: 5183-95. 3. Choi, J.S. *et al.* (2010) Expression of vascular endothelial growth factor receptor-3 mRNA in the rat developing forebrain and retina. J Comp Neurol. 518: 1064-81. 4. Choi, J.S. *et al.* (2007) Upregulation of vascular endothelial growth factor receptors

Flt-1 and Flk-1 following acute spinal cord contusion in rats. J Histochem Cytochem. 55: 821-30.
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Storage	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10072 available at: https://www.bio-rad-antibodies.com/SDS/6625-1010 10072
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos., HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC

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